

**REMARKS**

This Application has been carefully reviewed in light of the Office Action date mailed August 10, 2004 ("Office Action"). Claims 1-35 were previously pending in this Application. In this Amendment and Response, Claims 2, 7-16, 18-20, 24, 29, and 33-35 have been canceled, Claims 1, 3, 4, 17, 21, 27, 2, 30 and 32 have been amended, and Claim 36 has been added. Thus, Claims 1, 3, 4, 5, 6, 17, 21, 22, 23, 25, 26, 27, 28, 30, 31, 32 and 36 are now currently pending in this Application. Applicants earnestly believe that all of the Examiners objections and rejections have been addressed and overcome based on the claims as currently pending and as discussed below.

**Double Patenting Under 37 CFR 1.75**

The Examiner objected to Claims 1 and 27 as being a substantial duplicate of Claims 9 and 33. Applicants have canceled Claims 9 and 33, and submit that this objection has been overcome. As such, Applicants respectfully request that this objection be withdrawn.

**Non-Statutory Double Patenting Rejection**

The Examiner rejected Claims 1-18, 20, 22-24, 26, 27, 29, 30, 31, 33-35 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-6, 9-15, 32-35 of U.S. Patent No. 6,772,075 and over Claims 1-7 of U.S. Patent No. 6,360,178. As suggested by the Examiner, Applicants file herewith a terminal disclaimer from all owners of said Application and listed patents. Therefore,

Applicants respectfully request that this rejection be withdrawn.

**Rejection under 35 USC § 102**

The Examiner rejected Claims 1, 9, 17, 27 and 33 under 35 U.S.C. § 102, based on U.S. Patent No. 4,499,417 to Wright et al. (hereinafter *Wright*). Applicants have canceled Claims 9 and 33, and have amended Claims 1, 17 and 27 to more clearly define the invention. Claim 17 has been amended to include the limitation of Claim 19, which, as discussed below, has been indicated by the Examiner to be allowable if rewritten in independent form. Thus, Applicants submit that independent Claim 17, including all claims depending therefrom, i.e., Claims 22, 23 and 26, are also allowable.

Claim 1, as amended, generally recites the following limitation:

**determining a measure of disturbance power and energy for use in estimating a direction of disturbance with respect to the system as either in front of or behind the disturbance locating apparatus**

Claim 27, as amended, generally recites the following limitation:

**determining a disturbance power flow and a disturbance energy based upon the disturbance power flow through the line; and**

based on the disturbance power flow and the disturbance energy through the line, estimating a relative direction to the source of the disturbance from the monitoring location

Both of these limitations require the use of both disturbance power flow and disturbance energy. This is not taught, described or suggested by *Wright*. Thus, Applicants respectfully submit that independent Claims 1 and 27, including all claims depending therefrom, i.e., Claims 3, 4, 5, 6, 28, 30, 31 and 32, are also in condition for allowance.

**Allowable Subject Matter**

The Examiner stated that Claims 19, 21, 25, 28, and 32 are objected to as being dependent upon a rejected base claim but would be allowable if rewritten in independent form. As discussed above, Claim 19 has been rewritten into independent form through an amendment to Claim 17, and thus is in condition for allowance, along with the claims that depend therefrom.

Claim 21 has been amended and rewritten in independent form as requested by the Examiner. Thus, Applicants submit that independent Claim 21, including all claims depending therefrom, i.e., Claim 25, is also allowable.

Claim 28 depends from currently amended Claim 27, which, as discussed above, has been distinguished from the *Wright* reference and should be in condition for allowance. Further, Claim 28 has been amended to generally recite the following limitation:

**monitoring location includes using the polarity  
and magnitude of the initial peak of the  
disturbance power**

In addition from the distinctions discussed above, none of the cited references teach the combination as claimed. Thus, Applicants respectfully request allowance of Claim 28.

Claim 32 has been amended to depend from amended Claim 27, which Applicant's submit herein is distinct from the *Wright* reference, and thus Claim 32 is in condition for allowance. Applicants have also rewritten Claim 32, as previously presented, into independent form through the addition of new Claim 36, and thus Claim 36 is in condition for allowance.

In light of the foregoing, Applicants submit that the Application is in condition for allowance, and Applicants earnestly seek allowance of Claims 1, 3, 4, 5, 6, 17, 21, 22, 23, 25, 26, 27, 28, 30, 31, 32 and 36.

CONCLUSION

Applicants respectfully submit that the Application is in condition for allowance, and Applicants earnestly seek allowance of Claims 1, 3, 4, 5, 6, 17, 21, 22, 23, 25, 26, 27, 28, 30, 31, 32 and 36. Should the Examiner have any questions, comments, or suggestions in furtherance of the prosecution of this Application, please contact Applicants' attorney at 214.979.3027. Applicants, through their attorney, stand ready to conduct a telephone interview with the Examiner to review this Application if the Examiner believes that such an interview would assist in the advancement of this Application.

To the extent that any further fees are required during the pendency of this Application, including petition fees, the Commissioner is hereby authorized to charge payment of any additional fees, including, without limitation, any fees under 37 C.F.R. § 1.16 or 37 C.F.R. § 1.17, to Deposit Account No. 23-3189 of Hunton & Williams (Dallas) and reference Attorney Docket No. 82274.98. In the event that any additional time is needed for this filing, or any additional time in excess of that requested in a petition for an extension of time, please consider this a petition for an extension of time for any needed extension of time pursuant to 37 C.F.R. § 1.136 or any other section or provision of Title 37. Applicants respectfully request that the Commissioner grant any such petition and authorize the Commissioner to charge the Deposit Account referenced above. Please credit any overpayments to this same Deposit Account.

ATTORNEY DOCKET NO. 82274.98  
CUSTOMER NO. 24347

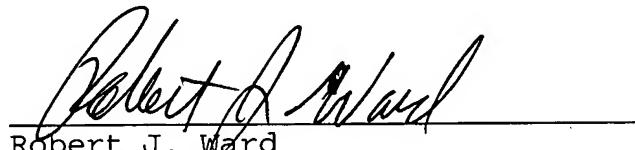
AMENDMENT AND RESPONSE  
SERIAL NO. 10/788,617

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This is intended to be a complete response to the Office Action date mailed August 10, 2004.

Please direct all correspondence to the practitioner listed below at Customer No. 24347.

Respectfully submitted,

  
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